What is claimed is:

1. A polishing composition, used in a manufacturing process of a device that includes an insulating layer having a wiring trench formed therein, a barrier film formed on said insulating layer, and a conductive layer formed on said barrier film to bury said wiring trench, wherein said polishing composition used for polishing said barrier film to expose an upper surface of said insulating layer; said polishing composition comprising:

silicon oxide;

a polyoxyethylene alkyl ether sulfate represented by formula 1,

$R^1-O-(C_2H_4O)_nSO_3-X$ ... (1)

wherein R^1 is an alkyl group having 3 to 20 carbon atoms, n is an integer from 2 to 30, and X is sodium, potassium, ammonium, or triethanolamine;

a benzotriazole corrosion inhibitor;

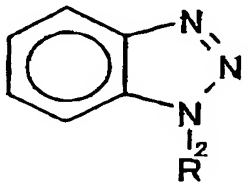
at least one acid selected from a group consisting of nitric acid, hydrochloric acid, sulfuric acid, lactic acid, acetic acid, oxalic acid, citric acid, malic acid, succinic acid, butyric acid, and malonic acid; and

water.

2. The polishing composition according to claim 1, wherein R^1 in formula 1 is an alkyl group having 10 to 15 carbon atoms.

3. The polishing composition according to claim 1, wherein said polyoxyethylene alkyl ether sulfate is polyoxyethylene lauryl ether ammonium sulfate.

4. The polishing composition according to claim 1, wherein said benzotriazole corrosion inhibitor is a benzotriazole derivative represented by formula 2,



...(2)

wherein R^2 is a hydrogen atom, an alkyl group containing a carboxyl group, an alkyl group containing a hydroxyl group and a ternary amino group, an alkyl group containing a hydroxyl group, or an alkyl group.

5. The polishing composition according to claim 4, wherein said benzotriazole corrosion inhibitor is 1-[N,N-bis(hydroxyethyl)aminomethyl] benzotriazole.

6. The polishing composition according to claim 1, wherein said acid is lactic acid.

7. The polishing composition according to claim 1, wherein the silicon oxide compounded in said polishing composition is in a quantity larger than 5 g/liter and smaller than 50 g/liter.

8. The polishing composition according to claim 7, wherein said silicon oxide is colloidal silica having a particle diameter of 10 to 30 nm.

9. The polishing composition according to claim 1, wherein the polyoxyethylene alkyl ether sulfate compounded in said polishing composition is in a quantity larger than 0.02 g/liter and smaller than 4 g/liter.

10. The polishing composition according to claim 1, wherein the benzotriazole corrosion inhibitor compounded in said polishing composition is in a quantity larger than 0.5 g/liter and smaller than 10 g/liter.

11. The polishing composition according to claim 1, wherein the acid compounded in said polishing composition is in a quantity larger than 1 g/liter and smaller than 20 g/liter.

12. The polishing composition according to claim 11, wherein the polishing composition has a pH that is in the range of 1.5 to 4.0.

13. A method for manufacturing a polishing composition, used in a manufacturing process of a device that includes an insulating layer having a wiring trench formed therein, a barrier film formed on said insulating layer, and a conductive layer formed on said barrier film so as to bury said wiring trench, said method comprising a step of mixing:

silicon oxide;

a polyoxyethylene alkyl ether sulfate represented by formula 1,

$R^1-O-(C_2H_4O)_nSO_3-X$ ... (1)

where, R^1 is an alkyl group having 3 to 20 carbon atoms, n is an integer from 2 to 30, and X is sodium, potassium, ammonium, or triethanolamine;

a benzotriazole corrosion inhibitor;

at least one acid selected from a group consisting of nitric acid, hydrochloric acid, sulfuric acid, lactic acid, acetic acid, oxalic acid, citric acid, malic acid, succinic acid, butyric acid, and malonic acid; and

water.

14. The method according to claim 13, wherein said silicon oxide is colloidal silica having a particle diameter of 10 to 30 nm, and the silicon oxide compounded in said polishing composition is in a quantity larger than 5 g/liter and smaller than 50 g/liter.

15. The method according to claim 13, wherein the polyoxyethylene alkyl ether sulfate compounded in said polishing composition is in a quantity larger than 0.02 g/liter and smaller than 4 g/liter.

16. The method according to claim 13, wherein the benzotriazole corrosion inhibitor compounded in said polishing composition is in a quantity larger than 0.5 g/liter and smaller than 10 g/liter.

17. The method according to claim 13, wherein the acid compounded in said polishing composition is in a quantity larger than 1 g/liter and smaller than 20 g/liter.